REMARKS

Claims 1-13, amd 15-21 are pending in the application and rejected. Claims 14, 22 and 23 were withdrawn from consideration as being directed to nonelected invention. Claims 14, 22 and 23 have been cancelled without prejudice and applicant reserves the right to prosecute subject matter of cancelled claims in subequent applications.

No new matter has been added by these amendments.

Non-statutory Double Patenting

Claims 1-10 and 15-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-6, 8-10, 14, 17, 19-20, 22-24, 26-28,40-41, 43, 47-48, 50, 52, 54, 55, 57, and 59 of copending Application no. 10/055,109 in view of Goldsborough.

Applicants respectfully disagree with this rejection. First, the claims of co-pending application no. 10/055,109 have been amended and may no longer present a potential double patenting issue.

Second, neither the co-pending application nor Goldsbrough teach, much less suggest, the presently claimed invention. In order for an invention to be obvious, the prior art, alone or in combination, must teach or suggest all the elements of the claimed invention. The co-ending application in view of Goldsbrough, do not suggest all the elements of claims 1-10 and 15-21.

Neither the co-pending application nor Goldsbrough teach, much less suggest, that amplification using PCR for no more than 25 cycles. As explained in the specification on page 25, lines 27-28, "PCR amplification is restricted to <25 cycles in order to achieve the linear representation of the mRNA concentration." The linear representation of the mRNA population is important for quantitating the amount of a particular sequence present in a samples and for detecting changes in the pattern of RNA expression in a tissue or cell associated with exposure to an internal or external factor. Further, the quantitation between samples can be between, for example, normal and diseased tissue, different stages of development, different organisms, and different tissues (spec. page 10). Further, there is no expectation of success provided in the co-pending application or Goldsbrough that using under 25 cycles of PCR would provide linear representation of mRNA concentration and ability to quantitate the transcripts betweem two sample populations.

In view of the above arguments, this rejection is overcome and Applicants respectfully request its withdrawal.

Claim Rejections 35 USC § 103

Claims 1-13 and 15-21 are rejected under 35 USC § 103 (a) as allegedly being unpatentable over Goldsborough (GB 2 295 228) in voew of Warthoe (WO 98/51789). In particular, the Office Action contends that it would have been obvious for a person of ordinary skill to combine the "teaching of Goldsbrough with the teachings of Warthoe to improve the sensitivity and specificty of the method by including target coding because such inclusing of the limitation would enhance the isolation of new genes and identifying gene expression patter in any given cell".

Applicants respectfully disagree.

A finding of obviousness under § 103 requires a determination of the scope and content of the prior art, the level of ordinary skill in the art, the differences between the claimed subject matter and the prior art, and whether the differences are such that the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made. Graham v. Deere, 383 U.S. 1 (1966). The relevant inquiry is whether the prior art suggest the invention, and whether the prior art provides one of ordinary skill in the art with a reasonable expectation of success. In re O'Farrell 853 F.2d 894, 903 (Fed. Cir. 1988). Both the suggestion and the reasonable expectation of success must be founded in the prior art and not in the Applicants' disclosure. In re Vaeck 947 F.2d 488 (Fed. Cir. 1991).

The cited references, in combination, do not make obvious the presently claimed invention.

Attorney for Applicants respectfully disagrees with the Office Action's characterization of Goldsbrough. In particular, the page and line numbers cited by the Office Action do not always correspond to the subject matter for which they are cited. For example, amplification are found on pag 9, lines 5-11. The pages cited by the Office Action correspond as follows: page 6, lines 6-13 discuss adaptors, page 7, lines 25-35 discuss uses of the mthod, and page 11, lines 30-34 discuss RFLP analysis.

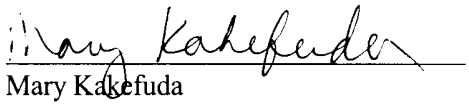
Most importantly, Goldsbrough does not provide any limitation to the number of rounds of PCR amplification as taught and claimed by the present invention and certainly does not teach to do no more than 25 cycles.

Warthoe et al. describes a method for making a normalized sub-divided library of amplified cDNA (abstract). In the discussion of amplification in Warthoe on page 43, lines 25-41, and page 44, lines 1-7, there is no teaching, much less a suggestion, that there should be no more than 25 cycles of PCR amplification.

Therefore, the references alone, nor in combination, describe each and every element of the claimed invention, which required the amplification for no more than 25 cycles. Thus, the claimed invention is not obvious.

It is believed that there is no need for an Extension of Time for entry of this paper. However, if it is deemed that any such extension or any other fees are necessary to maintain pendency of this application, then the Office is hereby authorized to charge Deposit Account No. 50-1744 (in the name of Syngenta Biotechnology Inc.) for payment of such fees.

Respectfully submitted,



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